

What is claimed is:

1. A method for moving a vehicle to a predetermined location, the method comprising the steps of:

producing a real time image of a potential taxi route;

comparing the real time image with a stored image to determine if the potential taxi route is clear between the location of the vehicle and a predetermined waypoint; and

taxiing the vehicle to the waypoint if the potential taxi route is clear.

2. The method of claim 1, wherein the step of comparing the real time image with a stored image comprises the steps of:

removing background features from the real time image; and

evaluating image features that are not background features to determine if those features are obstructions.

3. The method of claim 2, wherein the step of removing background features comprises the step of:

producing a difference image by subtracting a first image frame from a consecutive image frame.

4. The method of claim 3, further comprising the step of:
analyzing edges in the difference image to determine if a moving object is present.

5. The method of claim 2, wherein the step of removing background features comprises the step of:

producing a difference image by subtracting a first image frame from a stored image frame.

6. The method of claim 5, further comprising the step of:
analyzing edges in the difference image to determine if a moving object is present.

7. The method of claim 1, wherein the stored image is a georectified image, and the method further comprises the step of:

reverse georectifying the stored image prior to the step of comparing the real time image with a stored image.

8. The method of claim 1, wherein the real time image is provided by one or more of: visual, electro optical, and infrared sensors.

9. The method of claim 1, further comprising the step of:
controlling the taxiing step in response to temperature and speed of the vehicle.

10. An apparatus for moving a vehicle to a predetermined location, the apparatus comprising:

a sensor for producing a real time image of a potential taxi route;

a processor for comparing the real time image with a stored image to determine if the potential taxi route is clear between the location of the vehicle and a predetermined waypoint; and

a vehicle control for taxiing the vehicle to the waypoint if the potential taxi route is clear.

11. The apparatus of claim 10, wherein the processor removes background features from the real time image, and evaluates features that are not background features to determine if those features are obstructions.

12. The apparatus of claim 10, wherein the processor produces a difference image based on two consecutive image frames and then analyzes edges in the difference image to determine if a moving object is present.

13. The apparatus of claim 10, wherein the processor produces a difference image based on a real time image frame and a stored image frame and then analyzes edges in the difference image to determine if a moving object is present.

14. The apparatus of claim 13, wherein the stored image is a georectified image and the processor reverse georectifies the stored image prior to comparing the real time image to the stored image.

15. The apparatus of claim 10, wherein the real time image is provided by one or more of: visual, electro optical, and infrared sensors.

16. The apparatus of claim 10, wherein the vehicle control controls the vehicle in response to temperature and speed of the vehicle.